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Model Ships and Power Boats

INCORPORATING *Ships and Ship Models*

EDITED BY EDWARD BOWNESS

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Contents

The Ship's Log

GREETINGS

At this season of the year we gladly take the opportunity of sending Christmas greetings to you, our readers, and, in the old familiar phrase, of wishing you a merry Christmas and a happy New Year. Christmas is the season for merriment and it is good once in a while to let ourselves go, to become children again if we are fortunate enough to have children in our homes, and to have a really good time. Model-makers are inclined to be solitary souls, but it will help us in every way to get outside of ourselves at this time and to enjoy ourselves with other people. As for the New Year it can only be a happy one to the individual if his innermost being is at peace with the world and with his neighbours. That you may one and all enjoy this inner peace is our earnest wish.

OUR COVER PICTURE

It seems appropriate this month to use a photo of the model of the ship *Thermopylae* which won the Championship Cup in the recent "M.E." Exhibition, as it has just been purchased by the National Maritime Museum, and will thus become one of the nation's treasures. We appreciate the compliment implied by the fact that one of the models in the exhibition should be considered worthy of a place in our national collections. Other ship models from the "M.E." exhibitions to receive similar honours are Dr. Longridge's *Victory* and his *Cutty Sark*, both of which are in the Science Museum, South Kensington, and Dr. Rowland's *Glaucus* and Mr. C. H. Line's four-masted barque *Elizabeth Lines*, which are both in the shipping gallery of the Scottish National Museum in Edinburgh.

We have been given to understand that the *Thermopylae* model will occupy a prominent place in the series of models illustrating the development of the sailing ship, which will be a feature of the new East Wing at Greenwich to be opened next year. The model will, however, be put on show almost at once, and we recommend those who have not yet seen it to take the first opportunity of going to Greenwich to inspect it. It is not a large model, being to the scale of $\frac{1}{8}$ in. = 1 ft. as against the more usual museum scale of $\frac{1}{4}$ in. The good impression it creates is due to its beautiful proportions and exquisite workmanship rather than to its size.

Mr. I. W. Marsh of Barry Dock is the builder, and we congratulate him most heartily on his success. On another page will be found his own story of the building of the model, which we are sure will be read with great interest. Although the fee paid to Mr. Marsh was a considerable sum, Mr. Frank Carr the director of the museum, admitted from the beginning that it was impossible fully to recompense in hard cash a model-maker for the hours of patient labour spent on such a model. It is perhaps a very good thing, as there is thus no inducement to make such models for profit; they must always be the result of an intense love of ships and of ship modelling for its own sake.

*MODEL MARINE POWER PLANTS

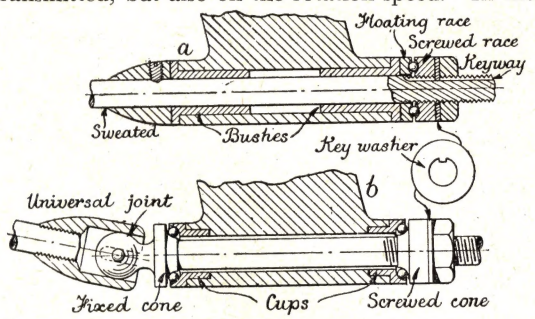
by Edgar T. Westbury

TO wind up this series of articles, I propose to give a few hints on essential accessories in model marine installations, other than the actual power units themselves. A good many queries on these components have been received, especially from beginners who find that there is more in installing an engine in a boat than meets the eye. Even when the efficiency and reliability of the engine is beyond all question, its success as a marine propulsion unit may be made or marred by the way it is installed in the hull, and the details of transmission gear and other accessories. Sometimes even minor and apparently almost insignificant items of equipment may have far-reaching effects on the results obtained with the boat. It is not beyond the bounds of possibility for model power boats to be as reliable and trouble-free as modern motor cars, and some of them approach this ideal in practice ; but there are, alas, all too many which fall far short of it.

PROPELLER SHAFTS

Among the most common faults in model power boats are those due to badly installed propeller shafts, including faulty alignment, insufficient support of bearings, and excessive angularity of shafts, all of which tend to produce friction and waste of power which can ill be spared.

The size of shaft which should be used in a particular case will depend not only on the power to be transmitted, but also on the rotation speed. In the case of speed boats, the high engine r.p.m. enables a considerable power to be transmitted by a small shaft, and large shafts are undesirable on account of the water resistance they produce. On the other hand, a tug boat having a slow-running propeller may call for a much larger shaft, to deal with heavy torque. Small, low-powered boats driven by electric motors, or the simpler types of steam engines, do not usually have shafts larger than $\frac{1}{8}$ in. diameter, but if anything much less than this is used, it is difficult to maintain reasonable rigidity, or to attach couplings in a secure and satisfactory way.



Above : Stern bearing with plain bushes and ball-thrust race.
Below : Articulated propeller shaft running in cup-and-cone ball bearings.

In most cases, it is desirable to provide a long bearing where the shaft emerges from the hull ; this is known as the stern tube, and is often equipped with a packing gland, though the necessity for this may be open to question, especially in low-powered boats, where the friction of the gland may result in serious power loss. A close-fitted plain bush is quite satisfactory, if it is kept well lubricated, preferably with continuous feed from an ample-sized well or syphon box. The minimum unsupported length of shaft is desirable, either inside or outside the hull ; in some types of boats it is convenient to attach the propeller to the shaft immediately adjacent to the stern tube, but more often it is necessary to extend the shaft and fit an additional supporting bearing, on a stern bracket or skeg.

The angle of the propeller shaft should always be kept as close to the horizontal line as possible. In deep-draught boats it is often possible to keep it dead level, but flat-bottomed, shallow-draught hulls are more difficult in this respect, and some very glaring examples of excessive shaft angle are encountered in these boats. Remember that only the horizontal component of thrust is usefully employed, and if the propeller exerts a downward thrust, it not only wastes power, but tends to upset trim and navigational stability.

Articulated propeller shafts are, generally speaking, only necessary in racing craft, where their primary function is to enable the thrust line to be disposed so as to produce a lifting force at the forward end of the boat ; often however, this is overdone and defeats its own object.

Excessive changes of angle at universal joints or couplings also result in power wastage, and the installation should always be designed to keep engine shaft, transmission shaft and propeller as nearly in line as possible. Joints or couplings should be of sound mechanical design, but as simple as possible ; the couplings in small boats are often of very primitive design, but mechanical inefficiency can no more be condoned here than in larger and more powerful boats. A sound form of coupling for propeller shafts, suitable for speed and cruising boats alike, is the " ball and pin " type illustrated, which is truly universal, and being of small diameter, produces the minimum drag when used outside the hull.

A considerable amount of end thrust is produced by the propeller, and the bearings must be adequate, and of the correct type to withstand this. In full size practice, it is usual to fit a thrust block inside the hull, and this is often done in models, but is

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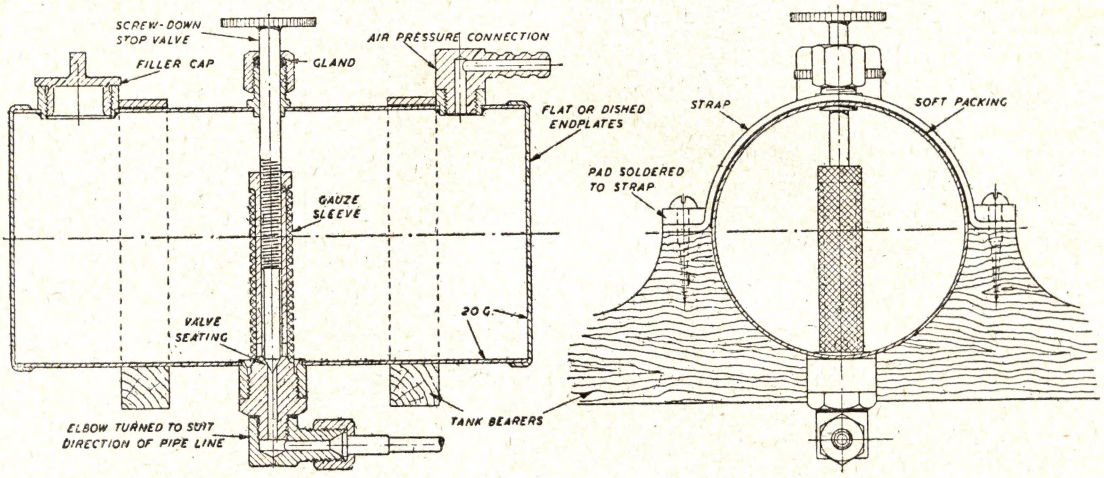
open to the objection that it puts the entire transmission shaft in compression, and may thus tend to encourage whip, which may be troublesome and occasionally disastrous. In model speed boat practice, it is customary to fit the thrust bearing in the stern bracket bearing, and two examples of ball thrust bearings are illustrated here. The use of ball bearings is obviously desirable, but when used underwater, both the balls and races must be of stainless steel, unless they can be dismantled, dried out and greased after each run.

An alternative to ball thrust bearings, where thrust is not excessive, is a bakelite thrust washer, which is self-lubricating in water, and this has been used with success, even in fairly high-powered speed boats. End thrust should never be taken on the bearings of the engine, electric motor, or transmission gearbox, an exception being made in the latter case where a special thrust bearing is incorporated.

Alignment of propeller shafts is by no means an easy matter to carry out properly, as the methods used in full-size boats are difficult or almost impracticable. Wherever possible, it pays to set out the alignment of the engine, stern tube and propeller in the course of constructing the hull, as it is much easier to see what one is doing while the hull is in skeleton form. A crude but very effective way of ensuring alignment is to make the hole for the stern tube larger than necessary, assemble the stern bracket, engine and propeller shaft, with the stern tube in position, and ascertained to be quite free, then fill in the gaps round it with plastic wood. This, of course, presupposes that the shaft must be dead straight, which in any case is a necessary condition for efficient working.

I do not propose to deal here with the subject of propeller design and construction, as it is not quite within the scope of these articles, and would require far more space than can be spared. There will be some practical articles on this subject appearing shortly in this journal. I would emphasise the fact that propeller design is a very inexact science, even in full-size practice, and all model power boat constructors should be prepared to experiment with propellers of various sizes and pitches in order to obtain the best results. Attempts have often been made to specify the correct propeller for each type of engine or boat, but conditions vary so widely that these are usually futile. The fact that in a large ship, such as the ill-fated *Normandie*, the first propellers fitted proved to be hopeless, should point its own moral !



A recommended arrangement of fuel tank, and method of installation, adaptable to a pressure feed system.

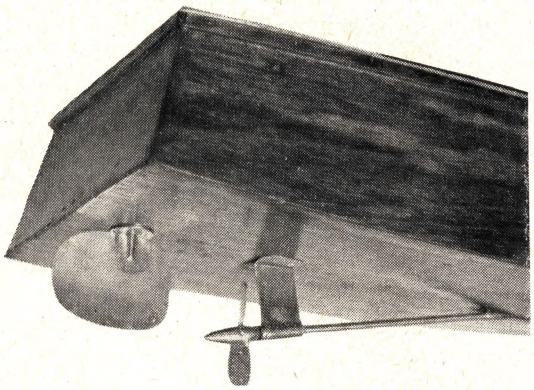
FUEL TANKS

A good deal of trouble is often encountered, particularly in boats driven by i.c. engines, by failure of fuel feed, and though this may be due to any one of a large number of causes, which cannot be discussed in the space available, it is safe to say that in many cases, careless design and arrangement of fuel tanks may be a contributory factor. At first sight, the fuel tank often seems very unimportant in the scheme of things, and any old vessel which will contain the required amount of fuel for a run would appear suitable ; but in practice it calls for just as much care and forethought as the rest of the plant, and a crude lash-up often meets with no more success than it deserves.

Fuel tanks should always be provided with some means of mounting them securely in the hull, in a suitable position for feeding the engine without excessive length of pipeline, and their structure should be sound enough to stand the vibration and shocks they invariably encounter. Some form of fuel filter should *always* be provided, preferably inside the tank, where it is continually washed clean, rather than in the pipeline, where it may fill up and choke. The height of the tank may be very important, according to whether the carburettor is

intended to be fed by gravity or by suction ; in some cases pressure feed, usually by means of an inflated bladder, is used, when the height of the tank becomes relatively unimportant.

In fast speed boats, running on the circular course, the effects of centrifugal force often create fuel feed problems, and the position of the tank relative to the engine, the layout of the feed line, and even the shape of the tank may call for experiment.



A typical propeller shaft and stern bracket, suitable for shallow-draught cruising boats

The indiscriminate use of flexible feed pipes is not, in my opinion, desirable, for while a flexible connection may often be the best means of coping with the effects of vibration, it is less permanent than a properly fitted metal pipe and is often the source of mysterious troubles due to air or fuel leaks ; in many cases the use of slip-on flexible pipes is simply the line of least resistance, and is as slovenly as it looks.

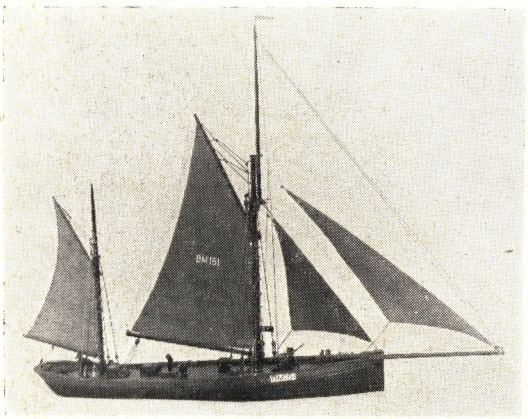
Many small engines have fuel cups attached directly to the carburettor, and thus dispense with a separate fuel tank and pipeline ; while this simplifies installation, it is often found that the fuel in the cup is whipped up to froth by engine vibration. A more reliable feed may be obtained by using a separate tank which, generally speaking, should be located at about the same height as the original reservoir.

CONCLUSION

In this series of articles, I have done my best to outline, in broad terms, the essential principles of power plants for all types of model power boats, with a view to the guidance of the inexperienced constructor. As I have more than once pointed out, no attempt has been made to go deeply into technical matters or discuss constructional details, which can more effectively be dealt with in separate articles by practical contributors, some of which have already appeared, and more are forthcoming in the future.

I have laid special stress on the desirability of improving realism in prototype craft, both in respect of the type of power plant and its working characteristics, because I believe that the popularity of model power boats, among those who understand and love ships, can be most effectively promoted in this way. Improvement in speed and efficiency is undoubtedly a very worthy aim also, but it will profit us nothing if it produces merely shapeless boxes of roaring mechanism which lack the charm of variety, and may fill genuine ship enthusiasts with horror. I am as keen on speed boats as the next man, but I have to admit that the one-track pursuit of speed often gets its devotees a bad name, and is responsible for hostility towards model power boats in quarters where we often have to seek privileges to enable us to carry on our hobby.

Let us endeavour, therefore, to be not only good model engineers, or builders of good boats, but also good and responsible citizens. I leave you, readers, with this thought, at the season of peace and goodwill to all men ; and may the coming year enhance still further the interest and popularity of the most satisfying of all models—the model power boat.



Mr. Green's W.L. model Brixham trawler.

THE RAND SOCIETY OF MODEL ENGINEERS

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were cast in bronze and finished by filing and polishing. The engine is Westbury's 1831, 2 cyl. water-cooled, the castings being obtained in England and machined on a home made 4½ in. lathe. The model is radio-controlled, having a co-linear push-pull transmitter using HY615, 6.5 V valves working at regulation frequency of 125 megacycles. The receiver is a regenerative 3-valve screened detector HY615.

The second and smaller model is of a Brixham trawler and was built by Mr. L. E. Green, a previous prize winner. For this effort Mr. Green received a silver medal. As is usual with his models, this was a very neat and effective piece of work.

THE RAND SOCIETY OF MODEL ENGINEERS

Notes from an Exhibition in Johannesburg

THE above Society held an exhibition in Johannesburg some months ago and the chairman, Mr. Alan Deverall has sent us photographs of two of the prize-winning ship models. In his letter Mr. Deverall says : " I have been asked by fellow-members to send you their best wishes and to extend these to all other ship-modellers who are subscribers to your magazine. We regret that 6,000 miles makes it difficult for us to keep in closer contact."

We understand that in South Africa these exhibitions are usually held in connection with the big agricultural shows to which people come from a very wide area. The promoters give the model engineering societies space as they find that the visitors always take a great interest in models. Valuable prizes are donated and thus models of a high standard are encouraged. One would hardly expect to find much interest in ship models so far from the sea, but a love of the sea and ships seems to be very wide-spread. Again, many of the Britishers out there visit their homeland from time to time and thus have first hand experience of ships.

In this exhibition the model of the motorship *Earl of Zetland* was awarded the society's gold medal as being the best exhibit in the show, and also received two other prizes of great value. The model was made by Mr. W. Donnelly who visited this country last year at the time of the " M.E." Exhibition and made many friends amongst British ship-modellers. During the exhibition and also at the Grand Regatta he gave valuable assistance in the judging of the ship models. On his return, as a result of what he had seen over here, he made many improvements to his model, and these no doubt helped toward his success at the Rand Exhibition.

The model is built to the scale of $\frac{1}{2}$ in. = 1 ft. from drawings supplied by Hall Russell & Co. of Aberdeen, the builders of the prototype. Its dimensions are 7 ft. long by 14 in. beam and the weight loaded is approximately 125 lb. The hull is built of Limba, a hard African wood, on the bread and butter system, and the deck is laid in individual planks on oak beams. The deck-houses are of plywood. The rigging is of 30-gauge copper wire properly laid in 3, 4 and 6 strands on " Jason's " rope-making jenny. The ventilators are of tin plates cut out to the correct shape and soldered. The propellers

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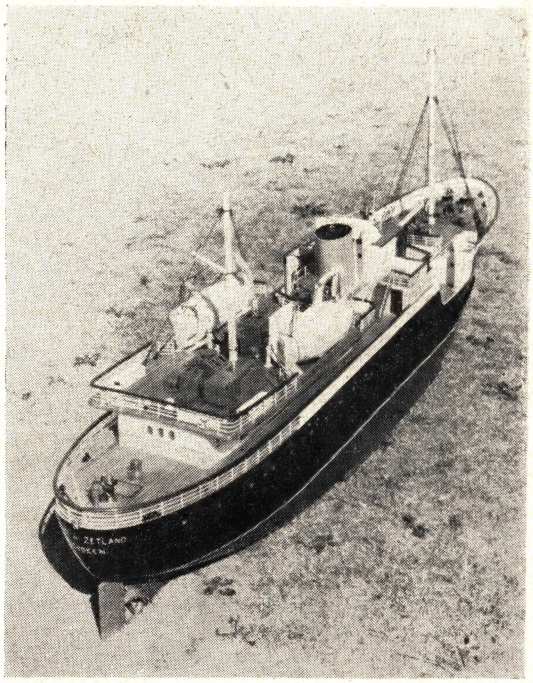
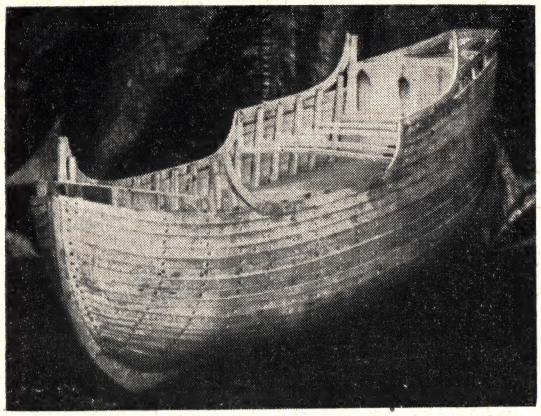


Above and below : The 7 ft. model Earl of Zetland.



★A Model of an EARLY XVI CENTURY SPANISH CARRACK

by

A. E. Field

Mem. Soc. Naut. Res.

THE planks were pinned and glued to the shaped blocks at the bow and to each frame, and holes slightly smaller than the pin used were drilled through the planks to prevent splitting. The actual method used was to cut the end of the plank with a sharp chisel to the correct angle and bevel to fit snugly against the stem. Two holes were drilled for securing to the shaped block at the bow and the block and the first few frames and the inside of the plank smeared with seccotine. With the hull resting between my knees the plank was nailed to the shaped block at the bow, then carefully bent round until it touched the first frame. It was held in this position while another hole was drilled (using a fine twist drill about 74 morse in a pin vice) then nailed to frame, the process repeated, smearing more seccotine to inner side of plank and edge of frames as required, until the stern was reached, where two pins were used to fix it. The surplus was cut off leaving about $\frac{1}{8}$ in. of the plank projecting beyond the stern, to be finally trimmed to shape later.

The corresponding plank on the opposite side of the keel was then fixed in the same way. The next planks on either side were then offered up in position and finally trimmed before being fixed in like manner. This process was continued, fitting one plank to port and one to starboard to avoid straining the hull structure out of line, until the lower wale position was reached.

The upper planking of the hull was parallel and a simple method used for cutting it may be of interest. The width of planking was marked with a pencil on the $\frac{1}{16}$ in. sycamore and the board laid on a piece of plate glass (which incidently serves me for a surface plate !). A steel straightedge was laid on the sycamore to the pencil lines and held firmly while a few strokes with an " Ever Ready " type of razor blade (having reinforced back) soon cut the separate planks.

WALES

On actual ships the wales were made of timber having considerably greater thickness than the hull planking and were fixed direct to the frames. On the model, however, in view of the difficulty of bending such comparatively thick timber round the very bluff bow, recourse had to be made to a " wangle "! The lower wale was made in two layers and the upper main wale, in view of its " moulded " formation, in three layers. The top layers of these wales were made of boxwood and it was found necessary to steam them to take the bend round the bow. They were left till the hull and deck planking was completed. I will deal with the method of steaming later.

The planking of the topsides and bulwarks was then continued, the top plank of the waist and half deck having to be cut out with the fretsaw owing to the shape of the " hances " between fo'c'sle and main-deck and half deck and main deck bulwarks.

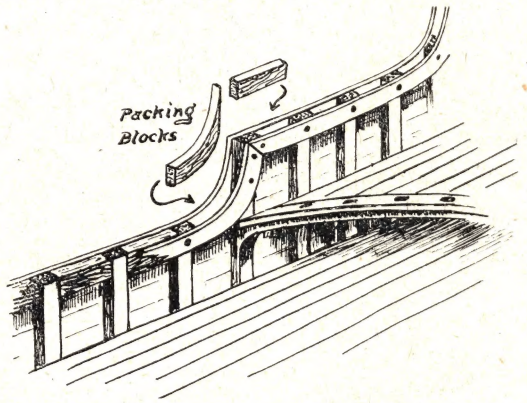


Fig. 2. Bulwarks of the waist and halfdeck showing tops of frames with packing blocks in between to form " bed " for caprails

Similar planks were cut out at the same time from $\frac{1}{16}$ in. satin walnut for the inboard side of the bulwarks. The outboard and inboard planks were glued and pinned right through each frame. Small blocks of satin walnut were then cut and glued in the spaces between the inboard and outboard shaped planks and the tops of the frames. These provided a firm " bed " to which the caprail was glued and pinned (see Fig. 2).

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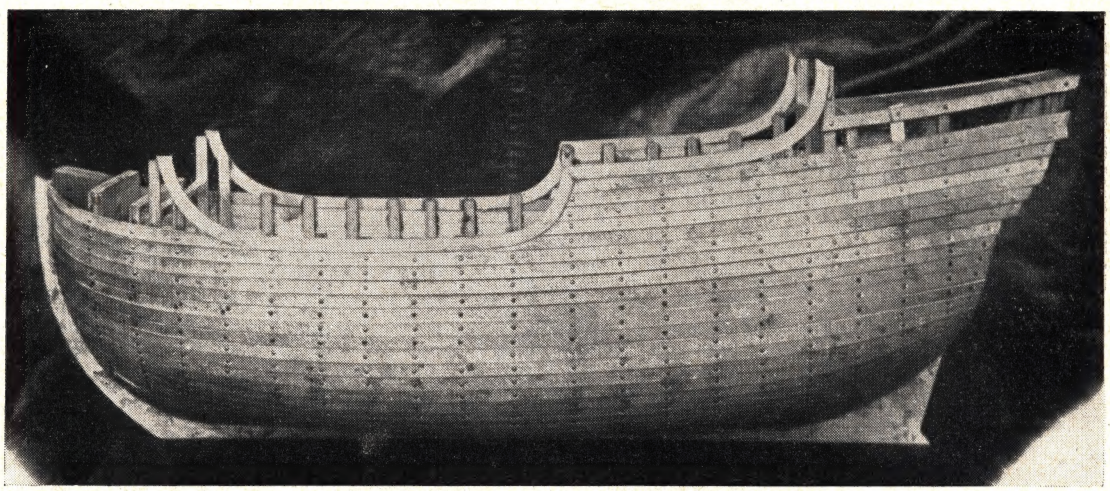


The stern was now planked in diagonal form on either side of the centre line and sufficient space left for the tiller attached to the rudder stock to pass into the hull. After completing the stern planking the projecting ends of the hull planking were filed down to the profile of the stern as shown on the sheer plan.

DECK PLANKING

Sycamore was also used for the planking of the main deck, half deck and fo'c'sle, but a contrasting timber was used for that commanding position—the poop. The margin planks of the fo'c'sle and poop were slotted for the bulwark stanchions (or brackets) and poop rail respectively before fitting to the hull. Black paper—of the kind used for wrapping photographic sensitised paper—was cut into narrow strips and glued between each deck plank. When thoroughly dry the upstanding edges of the paper were carefully scraped off (using a sharp chisel as *a scraper*), and the black line so left represented the caulking.

The hull was now carefully and thoroughly rubbed down with sandpaper, the sawdust which collected in the grooves between the planks being brushed out before carrying out any paintwork. The rudder together with its gudgeons and pintles, stanchions and fo'c'sle bulwarks and the rail around the poop were made and fitted at this stage. These parts were straightforward and require no description.

The hull below the waterline was given three coats of white cellulose paint and the planking above the waterline stained with a solution of Vandyck crystals in water. This part was afterwards french polished but not until the wales and caprails were fitted.

CAPRAILS AND WALES

These were made of boxwood, which statement will enlighten quite a few people who wondered why I had (and still have) a mania for collecting damaged or broken boxwood rulers !

In order to bend them to shape they had to be steamed for about half an hour in the very " Heath Robinson " but most effective steaming apparatus illustrated herewith (see Fig. 3). Its efficiency can be improved by putting one or two layers of cloth under the lid of the kettle and pushing this tightly into place.

Note—The water level should be below the top of

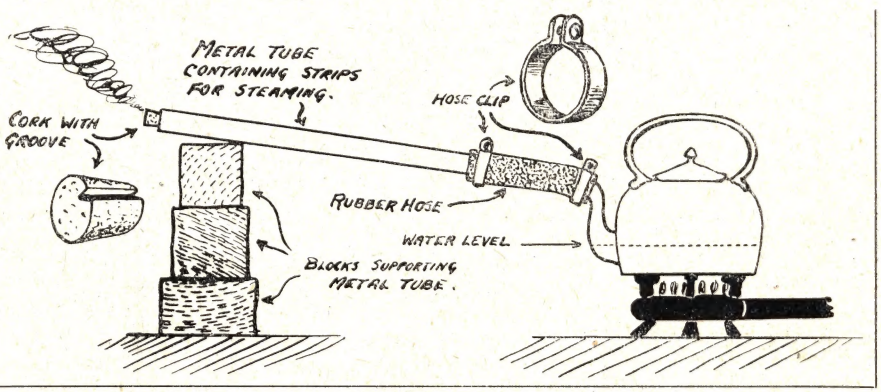


Fig. 3. Diagram of apparatus used for steaming the strips for bending

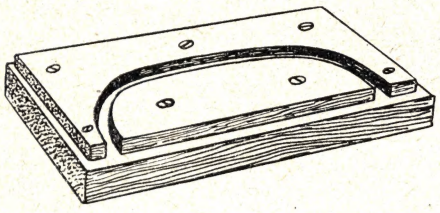


Fig. 4. Jig for bending and drying caprails of waist after steaming

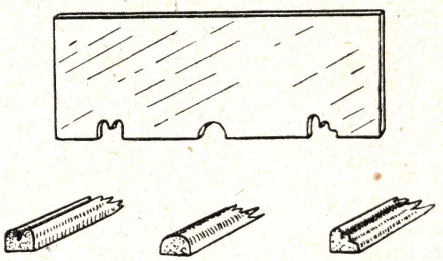


Fig. 5. Scraper made from steel plate for producing small mouldings

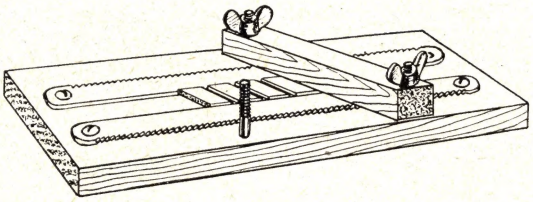


Fig. 6. Jig for slotting styles of the ladders

the spout orifice. Formers were made from scrap pieces of $\frac{1}{4}$ in. plywood and the steamed strips were bent and placed in these formers and allowed to dry out slowly (see Fig. 4). On removal it was found that they retained their shape.

The rounded or moulded edges of the wales, ledges and channels were easily made by scraping the edge of the boxwood with a piece of steel plate in which the required shape had been filed in one edge as shown in the sketch (Fig. 5).

After fitting the wales and caprails, but before fitting the vertical strakes and decorative work round the stern, the hull (above water line) and decks were french polished.

The vertical ribs or skids were next tackled and required considerable patience as the only way I could successfully make them was to cut them roughly to profile with a fretsaw, then carefully file them to fit the hull, using great care where they were " notched " to cross the wales at varying angles and finally to taper them down in section.

The decorative or " gingerbread " work around the stem demanded delicate work with fretsaw and needle files—here again not so much skill as patience !

The circular surrounds for the hawse holes and two " gun ports " were turned in the lathe from boxwood. The channels and their brackets were cut out with a fretsaw and carefully " notched " to fit over the vertical skids and like the latter were drilled and secured to the hull with pins.

DECK FITTINGS

Ladders. These were made from boxwood stringing —an exceedingly useful material for ship modelling. It is obtainable from cabinet makers' suppliers in 3 ft. lengths in a variety of sizes including $\frac{1}{16}$ in. × 1/32 in., $\frac{1}{8}$ in. × 1/32 in., $\frac{1}{4}$ in. × 1/32 in., $\frac{1}{16}$ in. square, $\frac{1}{8}$ in. square, etc.

The method adopted is that described in Dr. Longridge's very excellent book—*Cutty Sark* ; *The Ship and a Model*—published by the proprietors of this journal. A simple jig is made for slotting the styles of the ladder and the treads are glued into the slots.

The jig is simply a piece of board to which two parallel strips of steel or thin hacksaw blades are fixed about $\frac{3}{16}$ in. apart. A " guide " of $\frac{1}{2}$ in. × $\frac{1}{2}$ in. hardwood is secured, at the angle required for the slots, across the steel strips. Pencil dots are carefully marked near the edge of a piece of suitable stringing at the places where slots are required. Using a fine jeweller's brass back saw held close against the guide cut the slots in the stringing, which is threaded under the guide between the metal strips and held securely by pressure on the guide. The metal strips will prevent the saw cutting right through the styles and the slots will be of uniform depth. See Fig. 6.

For the opposite style, swing the guide over to the spare bolt shown in the sketch which is accurately positioned to enable the angle to be exactly reversed.

The treads are also made from boxwood stringing which can be rubbed down on sandpaper to the required thickness and then glued into the slots in the styles.

Rails. The pillars for the rails at the break of the fo'c'sle, half-deck and poop were made from square section boxwood stringing. A small round spigot was filed at the base of each pillar for gluing into holes in the deck. The corners of each pillar were " stop-chamfered " below the rail and finished off with a shaped head above the rail. These heads, which were passed through square holes filed in the rail itself were used for belaying some of the running rigging.

To be continued

SHIP MODEL PROTOTYPES No. 9

THE ULTRA-MODERN CARGO SHIP "*WANSTEAD*"

by Laurence Dunn

THE *Wanstead* and her sisterships the *Wendover* and the *Woodford* are generally accepted as the most noteworthy cargo ships built in Britain for many years. Built by the Caledon Shipbuilding & Engineering Co. Ltd., of Dundee, for the Watts, Watts Line, of London, the first ship, the *Wanstead*, ran trials late last year, while it was only in the late summer that the *Woodford*, the last of the trio entered service.

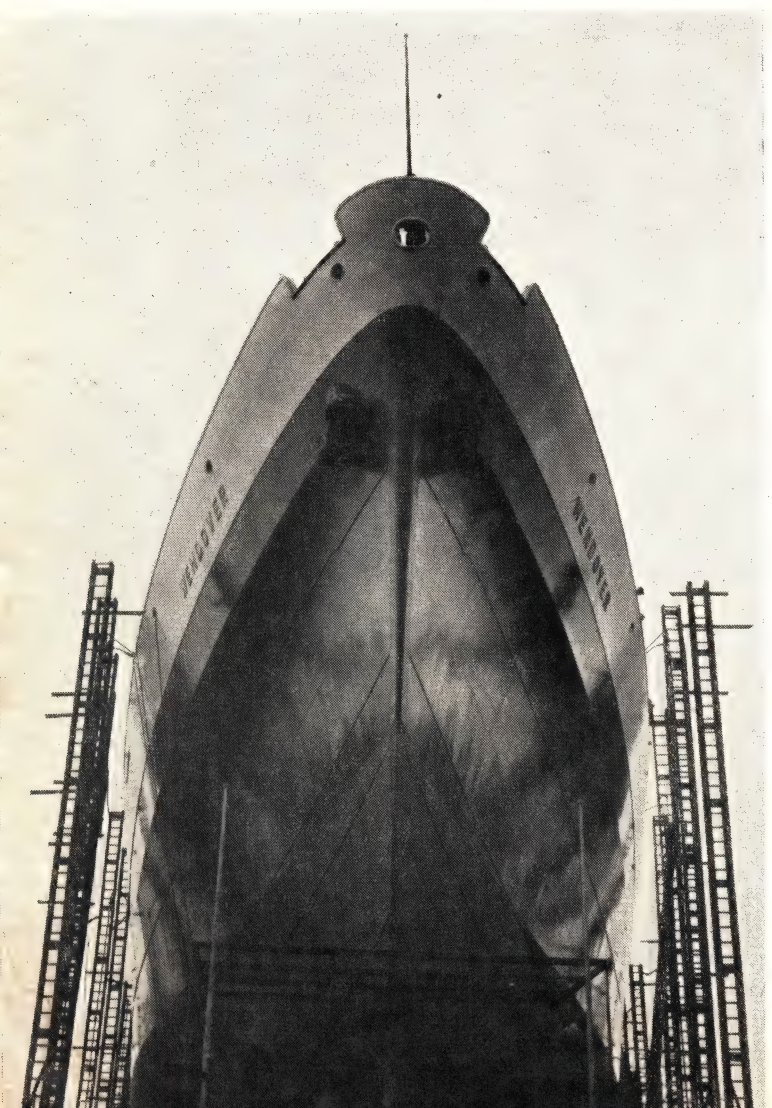
They have been designed to operate on a regular service which the company has started between eastern Canada and the European ports of Antwerp, Hamburg and Rotterdam. This is a most arduous route where much heavy weather may be expected. The keynote of the design is that the ships when at sea in heavy weather can be worked from below decks, without the crew having to go on deck. New standards of comfort for officers and crew have also been achieved, largely by the introduction of an entirely different layout of accommodation, so original that the designers had to obtain a special dispensation from the authorities at Geneva. The latter on examining the plans found that they offered so much more than anything they had ever envisaged that they at once gave the designers *carte blanche*. As a result, the crew are housed in a manner which many first-class passengers would envy.

The name of Watts, Watts & Co. Ltd. was for many years associated with tramp steamers usually of considerable age, but in the late 'twenties the firm changed their policy of buying only second-hand tonnage and instead commissioned the Caledon Co. to build three single deck 10½ knot steamers of some 9,000 tons d.w. and 5,400 tons gross. Delivered in 1928, they were named *Watford*, *Wanstead* and *Wendover*. They were of conventional three island type and were driven by the usual triple expansion engines. The *Watford* was later wrecked off the Canadian coast, the other two becoming war losses. Next came the three smaller ships of the "Dartford" class, handy vessels of 6,740 tons d.w., which were built by Smith's Dock Co. Then the Caledon yard was commissioned to build another trio, the more ambitious ships of the "Blackheath" class, which came out in 1936-38. Their design was carried still further in the *Teddington* and her two sisters, built at the same yard in 1940.

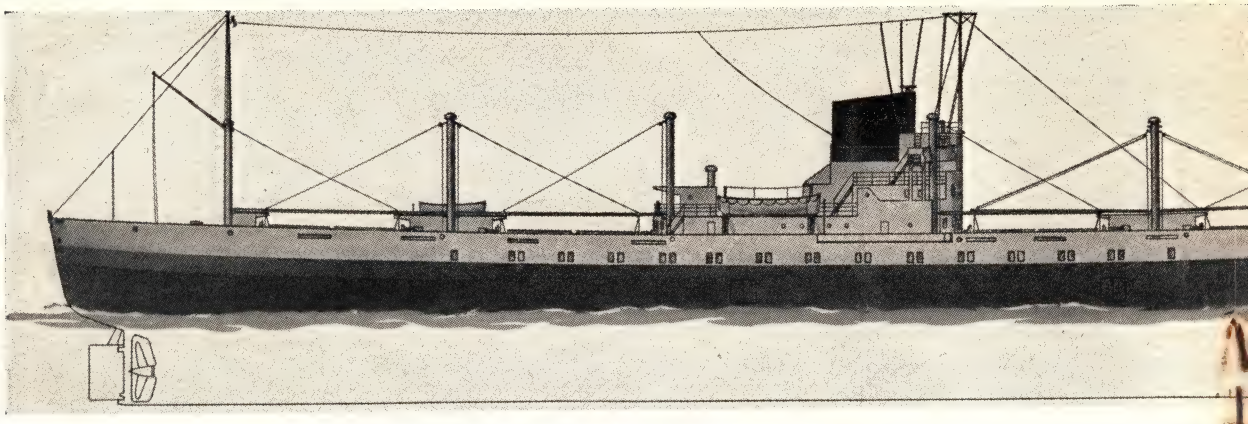
In the present trio, however, it is not a case of the gradual development of a design from earlier ships, but the creation of an entirely new one, which does, nevertheless, incorporate features proved successful in the others.

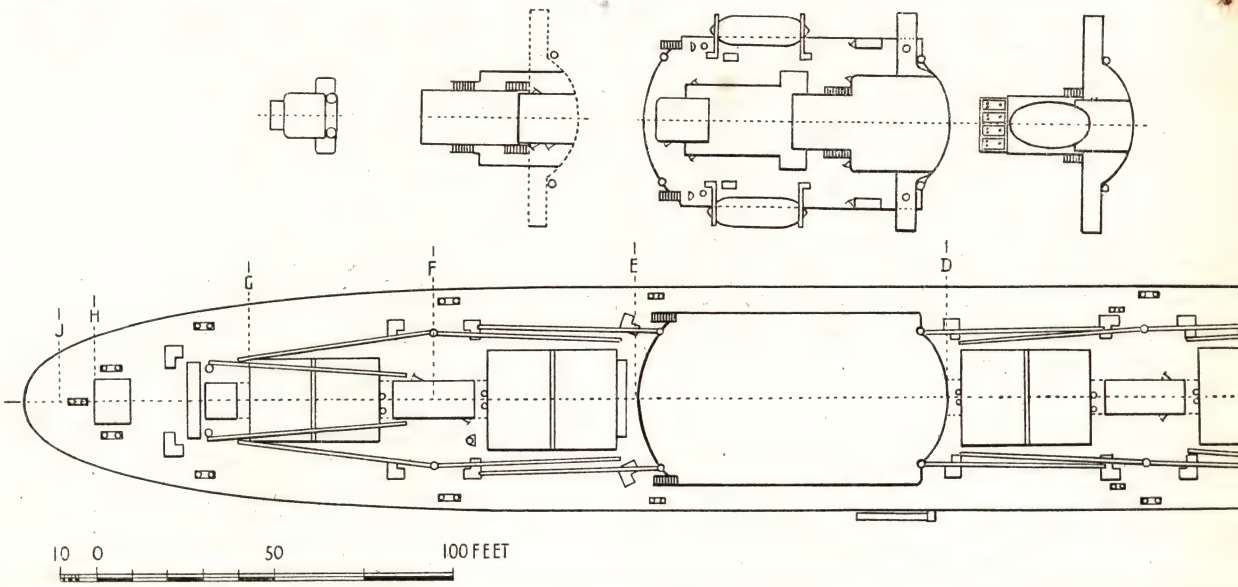
An example of this is the pronounced knuckle to be seen at bow and stern, this having been found to give a quick lift when meeting a wave or in a following sea.

The *Wanstead*, like her sisters, has a length of 440 ft. b.p., an extreme beam of 64 ft. 7 in., while laden to her summer marks she can lift a deadweight of 8,590 tons on a draught of 25 ft. 1 in. A single Scott-Doxford five-cylinder diesel engine of 5,500 b.h.p. drives a propeller of 17 ft. 6 in. diameter and gives a service speed of 15 knots.



Bow view of "Wendover" on the stocks.

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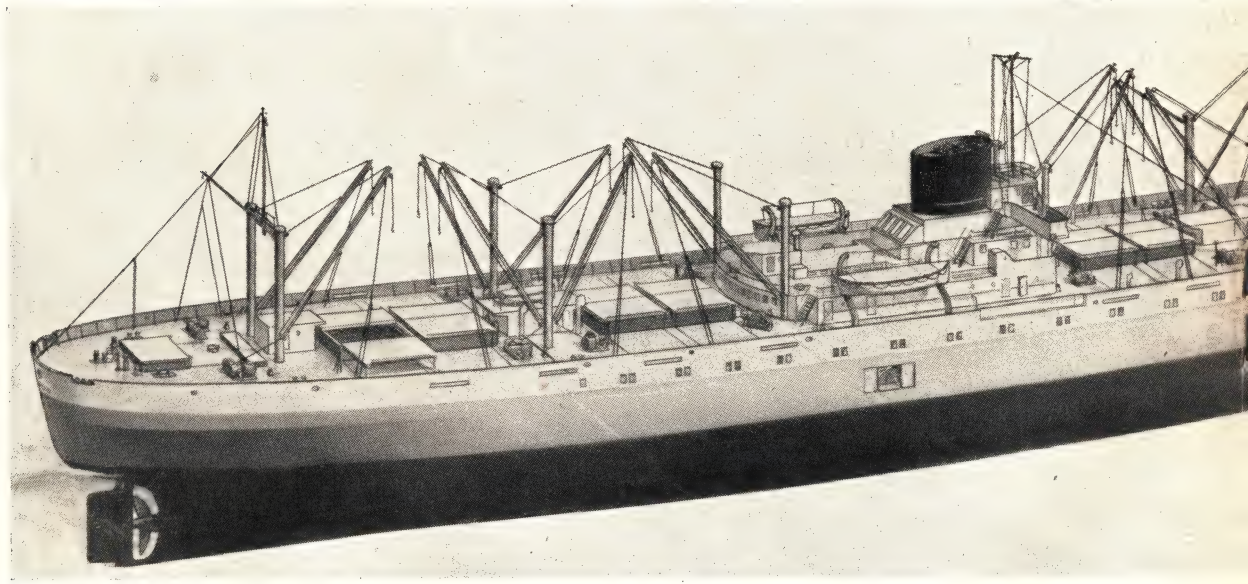
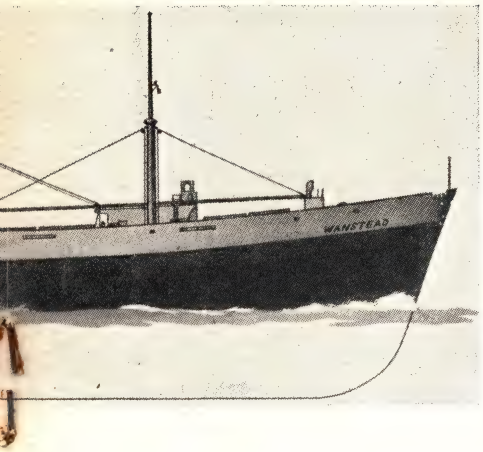
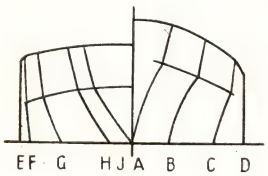


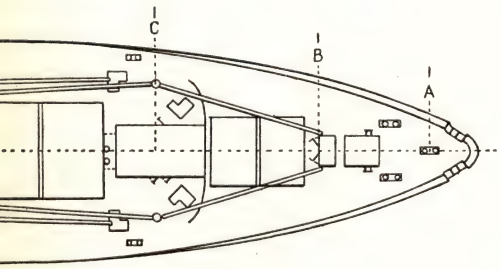


Stern plan or side elevation. Note this is to slightly smaller-scale than deck plans.

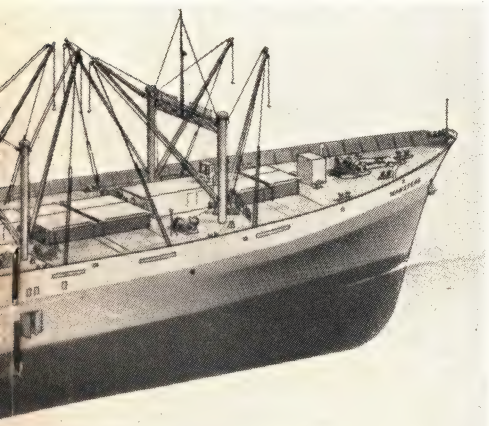


Left : Plans of bridge and superstructure.

Right : Sections or body lines above water.

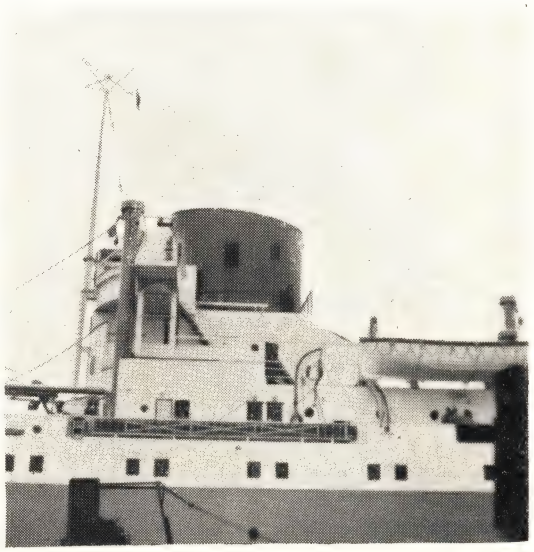


Plan of weather deck.



Aerial perspective view of ship. Note : A model with derricks stowed would look much smarter than as here shown.

View of port bow showing bridge, lifeboats in davits and other details.



Broadside view showing funnel, bridge and midships superstructure.

The weather deck, which is also the strength deck, has a very pronounced sheer. The shelter deck is placed about 2 ft. 6 in. above the load waterline and the 'tween decks are therefore extremely high. The crew's accommodation amidships is on a deck suspended under the weather deck, but still leaving about 8 ft. headroom in the 'tween decks below. Each man has his own single berth cabin, and these are all placed inboard and are air conditioned. Between them and the hull sides extend long galleries —200 ft. long on the starboard side—which serve

Continued on page 196

NOTES ON A MODEL OF "THERMOPYLÆ"

by I. W. MARSH

AS a young lad I remember seeing our local dock at Barry full of fine sailing ships. Unfortunately there were no tea clippers among them. My father used to make models of sailing ships and by watching him I was encouraged to start making models myself. My first real attempt was in 1920 when I came out of the army. It was a model of a steam yacht with sails which I copied from one my father had made. It won my father's approval so I continued, my next attempt being a model of a three-mast barque. This was reasonably good so I next made a model of a full-rigged ship. This was shown in the 1924 "M.E." Exhibition and gained a silver medal and the Handford award of £5. This was a great encouragement so I started on a model of *Thermopylae* showing her under full sail. This was shown at the 1927 Exhibition in an unfinished condition and was awarded a Bronze medal. At this time I went to sea and while at sea continued to make models. One of these, a $\frac{1}{16}$ in. scale model of the *Cutty Sark*, I sent to the 1932 Exhibition and was awarded a V.H.C. Diploma. My next model was again of the *Cutty Sark* ; this time to the scale of 1/10 in. to 1 ft. This was the runner-up for the Cup in the 1938 Exhibition and was also awarded the first prize in the Ship Models section. In 1947 I was once more the runner-up for the Cup, this time with a waterline model of *Sir Lancelot* under full sail. Even at that time I was working on my latest *Thermopylae* model and now determined to go all out for the coveted Cup. As the result of a good deal of correspondence and research I pieced together a mass of information about the ship. I obtained drawings of the sheer, half breadth and body plans which were taken from the lines published by The Science Museum, South Kensington ; the late Mr. Leask, of Liverppol, prepared the spar plans taking great pains to get it as accurate as possible. I was able to obtain further information from the various photographs which came into my hands.

Bow view of Mr. Marsh's model.

The hull was made from a block of well-seasoned yellow pine, hollowed out to a thickness of $\frac{1}{8}$ in. and decked in over beams, the deck being properly laid with planking made from old picture backing, which proved to be of good quality yellow pine. The insides of the bulwarks are panelled with fine holly veneer. The hull was then placed dead upright in a working baseboard, and a line was scribed right around it, $\frac{1}{16}$ in. above the waterline, to indicate the limit of the copper plating. Having obtained copper shim 2/1,000 in. thick I proceeded to cut the plates, 2,093 in number, with the aid of a steel straight-edge, a pair of dividers and a sharp-pointed knife. As the lines were scored on the copper the plates were broken off. Each plate is pinned on, about 20,000 pins being required. Entomologists' pins, No. 20 size, were used, each being cut off to $\frac{1}{8}$ in. long, pointed, and the heads filed flat. The plates were pierced with a fine awl to give the pins a lead and the pins were then tapped home with a watchmaker's hammer. Plating was started at the keel and worked from aft to forward, each plate overlapping at one end and one side. This is not a particularly easy job as owing to the greater width of the surface amidships six fairing strakes tapering off towards the bow and stern must be worked in. The job took over four months before it was finished. The rudder was made from lance wood and hangs on five pintles which were fastened with five straps on each side. Similar straps carried the gudgeons on the sternpost.

Details of the steering gear were obtained by measuring up a set which was lying in the yard where I work. In the model the left and right-hand threads on the spindle are 10 B.A. which will give one some idea of the size of the gear. The shaft is fitted with two nuts which are connected to the crosshead or tiller on the rudder by means of links on each side of the spindle. The overall length of the gear is only $\frac{15}{16}$ in. and it works perfectly.

The figurehead, which was made from a boxwood chisel handle, represents Leonidas carrying a short

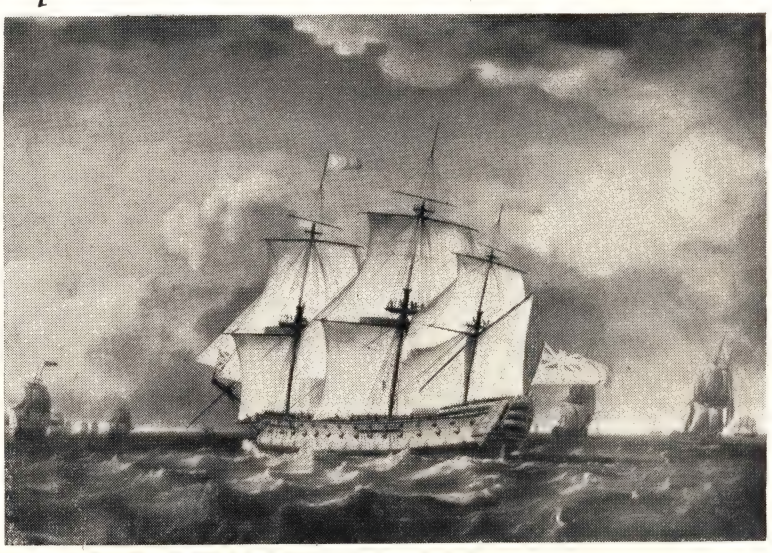
sword in his right hand and a shield in his left. The masts and spars were made from beech and boxwood and are fitted with jackstays and all necessary sleeves and bands. The dogs for the jackstays, which number about 500, were made from No. 8 entomologists' pins cut off to 3/32 in. long and holes drilled through the heads for the rods. The bands on the masts and yards were of $\frac{1}{16}$ in. wide brass strip and were fitted with all the necessary lugs. The hoisting yards have hinged parrel bands. The main topgallant yard has Collins and Pinkney's roller reefing gear which operates from the deck.

The blocks, numbering about 400, were made individually from boxwood strip. The deadeyes, of which there are nearly 200, were made from knitting needles from Woolworth's. These were pulled through a drawplate to bring them down to 3/32 in. dia. and a jig was made to drill the holes. The handrail stanchions were made from brass wire of suitable gauge. After the holes were drilled the balls were turned in a Stanley hand drill. This was fixed horizontally on the table and the job accomplished by turning the wheel with the left hand and filing with the right. The davits were made from $\frac{1}{16}$ in. brass wire tapered at both ends and then bent to shape. A hole was drilled through the ball at the top and a small eyebolt inserted from below. The eye plate for the span and guys was then riveted on the upper end of the eyebolt leaving it free to swing around. Finally, the belaying cleat was made and riveted on the davit.

The anchors were made from $\frac{3}{16}$ in. sheet brass cut out with an Abrafile and filed to shape afterwards. The stocks were made detachable as in the original. The deckhouse, which contained 230 separate pieces, was made from a piece of scarce Brazilian wood called Peroba-Rosa. This is a beautiful wood and is worth keeping in mind. The main pin rails, which were rebated into the bulwarks, were also made of this wood. The belaying pins, 200, in number, were turned from brass wire in the Stanley drill. The anchor cable was made from a charm necklet which happened to be scale size, the studs being soldered in. The hand winch, main, and fresh-water pumps are all workable. The accommodation ladder is made of brass and is composed of 96 separate parts. The grating at the top has 100 square holes in it. It is built up from strip brass 1/100 in. in thickness, the bottom strips being slotted to take the top strips and then all soldered together with Rawlplug fifty-fifty paste so as not to fill up the holes.

The standing rigging was made from Japanned flex wire from old wireless sets and laid up by hand on a silk heart(?). There were four different sizes. The running rigging, which is in five different sizes, is made of surgical silk and fly-tying silk toned to the natural colour with cinnamon dye. The rigging of this model was a complicated job which required a lot of forethought and planning. However, all the difficulties were finally overcome and the model seemed to give general satisfaction. I am proud to think that it has found a home in the National Maritime Museum at Greenwich, and also to think that at last I have won the Sailing Ship Championship Cup at a *Model Engineer* Exhibition.

The Shiplover's Christmas Card



Alongside we reproduce in monochrome the picture from the Christmas card produced this year by The National Maritime Museum. The picture, which is in full colour, is from an oil painting of H.M.S. *Victory* by Monamy Swaine and shows the appearance of the ship in 1793. The original open stern galleries are well shown and the lovely sheer of the hull which is emphasised by the black paint on the main wale. The effect of this sheer was somewhat lost when the ship was painted Nelson fashion which put the emphasis on the almost straight lines of the decks and gun ports. The t'gans'ls are furled, but otherwise the ship is in full sail and shows up well against the dark clouds and the turbulent sea.

These cards provide a convenient solution of the problem of what to send to the ship lover and model-maker. They can be obtained at the Museum for 6d. each or by post from The National Maritime Museum, Greenwich, S.E.10, at 3s. 6d. for 6 or 6s. 6d. for 12.

FOR THE BOOKSHELF

MASTER IN SAIL

By Capt. James S. Learmont

Published by Percival Marshall & Co. Ltd., London. 12s. 6d. net.

This is a grand book for lovers of sea literature. It is different from all the others in that it gives us a picture of seafaring from an entirely new angle. Other writers have told us of the ships and of their builders, some tell us of the business houses which owned and chartered the ships, and still others discuss the cargoes and the trades in which the ships were employed. But this book gives us an intimate, personal picture of the life of the shipmaster himself.

Beginning with his schooldays, Capt. Learmont tells us of how he went to sea before he was 12 years old in a small coasting schooner commanded by his father, then of his first sight of the big ocean-going ships at Maryport, Whitehaven, Glasgow and Liverpool. The sea was in his blood and it was not long before he shipped before the mast in the 600-ton barque *Craignair* bound for Iquique. His third voyage was in the barque *Strathdon* whose officers were interested in their boys, and his natural bent for study coupled with his keen interest and ambition to get ahead in his seafaring, enabled him to make the most of this opportunity. Although he never was an indentured apprentice he sat for his exams and obtained first one ticket and then another until by the time he was 23 he was fully qualified to take command of a sailing ship. He sailed in Messrs. J. & J. Rae's *Brenhilda* as mate and four years later, after a short interlude in Castle Line steamers, he returned to sail to take command of *Brenhilda*.

In his subsequent career as master he was able to carry out his somewhat unorthodox ideas of running a ship. He sailed his ships and drove his men but he saw to it that his ships were well found and his men well fed. He was rewarded in having men who signed on with him for voyage after voyage and gave him loyal service. The story of how he re-rigged his ship, the four-mast barque *Bengairn, ex-Pass of Brander* at Sydney after a dismasting makes excellent reading. He made a deep study of stellar navigation and contributed materially to our knowledge of that most useful subject. Altogether this is a most fascinating book. Our only criticism is that there should have been a portrait of the author. Those of us who have met him can see his big, commanding presence and hear his deep, booming voice throughout the book, and other readers ought to have been given a portrait to help them form some idea of his personality.

SHIPS

By David Pye

Being No. 6 of the series "The Things We See," published by Penguin Books Ltd., Harmondsworth Middx. 64 pp. 2s. 6d.

Other books in this series deal with houses, furniture, public transport, and so on. Unlike the other senses, such as taste, hearing and touch, the pleasures of sight can be indulged in freely to almost any extent, provided one understands and appreciates what one is looking at. This series of books will help to an understanding of what one sees in everyday life and thus to a tremendous enrichment of the experience of living.

Our particular interest being ships we are especially pleased to see a book on the subject included in the series, and having read and studied it we are greatly impressed with the fine job the author and publishers have made of it. There is an originality and freshness in the author's outlook which will give the ship modeller and marine artist much food for thought. For instance, quoting from page 4, the author says : " . . . in the last two hundred years few things of comparable importance have been as consistently well designed as ships ; yet naval architecture has been held in little esteem as an art. We find, for example, wholesale condemnation of the Victorian age for the crudity and pretentiousness of its arts of design, and the fact that this age produced the *Ariel*, *Thermopylae*, *Cutty Sark*, *Taeping*, and hundreds of other ships less well known but no less beautiful, has seldom been put forward in its defence."

The illustrations, of which there are no less than 85, are well chosen and beautifully reproduced, and show ships of many types, large and small, with the accent on modern ships. The author's original and penetrating comments on them add considerably to their interest. In short it is, I consider, the best " Penguin " we have seen, and the kind of book that only the Penguin people, with their huge circulation can produce at such a low price.

FLAGS FOR SHIP MODELLERS AND MARINE ARTISTS

By Alec A. Purves

Published by Percival Marshall & Co. Ltd., London. 3s. 6d. net.

In his ship-modelling the writer has frequently left his models without flags, simply to avoid the possibility of making a mistake. There are so many pitfalls, and sailors and experts are so finicky about their flags that it seemed safer, although admittedly not very courageous, to omit them altogether. But whether in a model or a painting flags are a great asset, giving a dash of colour, and sending a message to those who can interpret it. In his book, Mr. Purves, who is an acknowledged expert on the subject, presents in a clear and concise form a mass of information about flags which should enable both model-maker and artist to avoid making any mistake.

The contents cover British flags from pre-Tudor times to the present day, and include a very useful chapter on the flags of the principal maritime

Continued on page 195

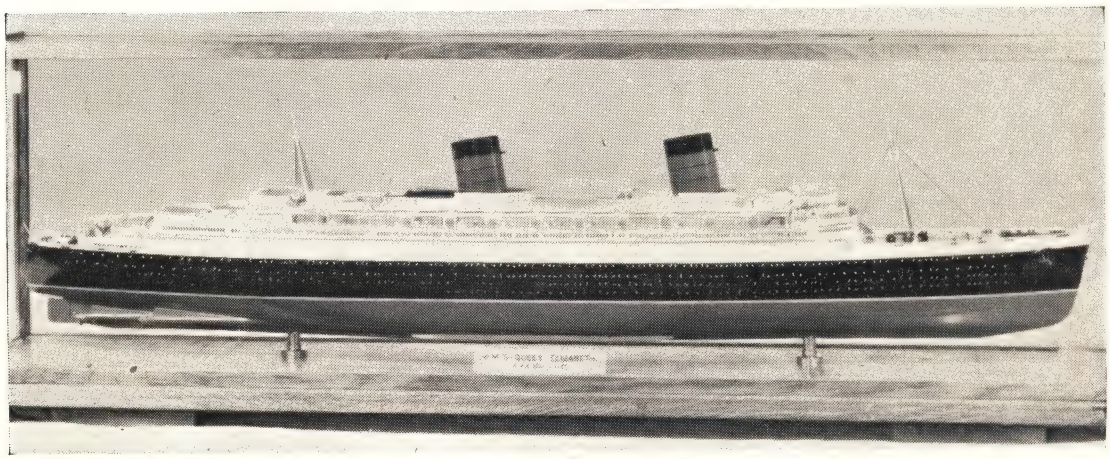
OUR READERS' MODELS No. 5

MR. T. C. STOTT'S CUNARD WHITE STAR LINER "QUEEN ELIZABETH"

IT was decided at the outset that the model should be made of the more "permanent" materials; the construction is therefore of wood and brass, no cardboard, paper or similar materials being used. Tinned copper wire has been used for all rigging, wireless aerials and rigging ladders.

The model is made to a scale of 1/25 in. to 1 ft. and as it is non-working the model is to scale in all respects as far as it has been possible to ascertain from the data and dimensions available.

All parts were finished painted before assembly, particulars of which may be of interest. All decks are dowelled and screwed into the next lower deck, the screws being so positioned that they are covered by the next higher deck or, in the case of the sports deck, the deck houses. Deck houses and the funnels rely on tight fitting dowels only for location and fixing. It is therefore possible to strip the model right down to its component details if, for any reason, this becomes necessary.



The hull is shaped from straight-grained pine up to the main deck, the rudder post, hawse holes and propeller shaft tubes being of brass. Decks above the main are also of pine (in places brass covered) but all deck houses and raised platforms are of brass. The promenade deck windows are cut in sheet brass, as are the bridge windows, with perspex backing. All deck fittings and davits are also brass. The lifeboats were cast in a plaster of paris mould in a low melting point metal, the core holes for fixing also being cast in. Railings and rigging ladders are of tinned copper wire soldered together on aluminium formers. The portholes are $\frac{1}{16}$ in. thick perspex, painted aluminium on the inside and inserted in the hull.

The portholes were inserted before painting the hull, being left proud so that any paint on their surface would be removed on the final rubbing down. In view of the difficulty which I encountered in painting the narrow decks of the bridge, separate decks were made which are held in position by the next deck or house above.

There are approximately 3,000 parts and the model took about 1,000 hours to make. This, of course, included the various templates, formers, etc.

[*Note.—This model was shown at this year's "M.E." Exhibition where it was greatly admired. It received a diploma—Very Highly Commended—not for its wealth of detail but for its accurate proportions and clean workmanship*—ED.]

FOR THE BOOKSHELF (*Continued from page* 194)

countries. Naval flags and signal flags are dealt with very thoroughly, and the methods of making and hoisting flags are fully discussed. The book concludes with a useful bibliography and a selection of typical signal hoists. Some hundreds of flags are illustrated, their colours being indicated by a convenient colour key. In any case the book is a "must" for the ship modeller and marine artist, and at its modest price of 3s. 6d. no one can afford to be without it.

*PROBLEMS IN SHIP MODELLING — PART III

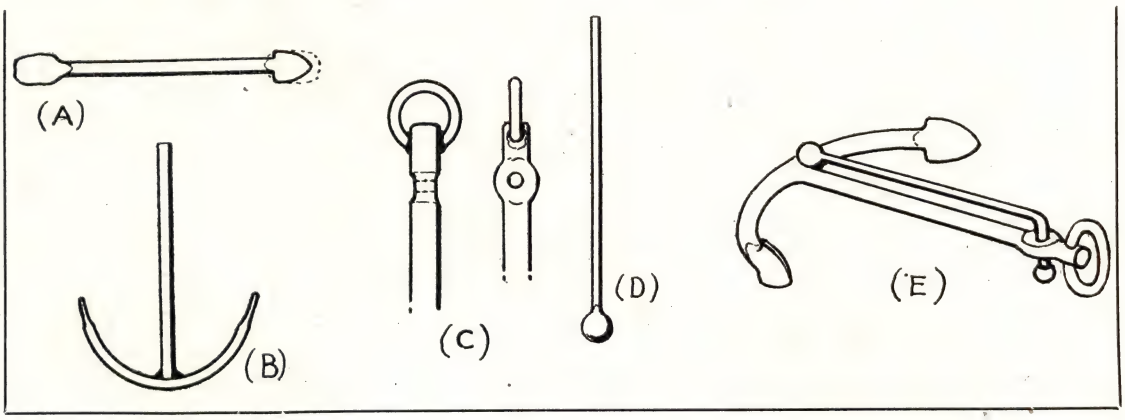
by Stuart E. Beck — THE ANCHOR

THE anchor, stowed on deck against the bulwarks, is of "Rogers" type, with its stock unshipped and lying along the shank. On the model the anchor is approximately $\frac{5}{16}$ in. long, and soft wire was used for its construction.

Two pieces of suitable length were cut, one for the shank and the other for the crown.

One piece was flattened at the ends with pliers, and the flats were shaped up with a file to form the flukes (*A*.) It was then bent to the necessary curve and soldered on to the shank (*B*). A ring of thinner wire was also soldered on to the shank. A flat was formed near the top of the shank, by pressure, and a small hole drilled in this for the stock to pass through (*C*). A small bead of solder was next run on to one end of a length of the thin wire to make the stock (*D*). The end of the stock was bent down at a right angle and put through the shank, being finished off with another bead of solder (*E*).

*Continued from the September issue, page 135.



SHIP MODEL PROTOTYPE No. 9

(*Continued from page* 191)

as additional recreation space. Here groups of tables and easy chairs are arranged at one side, under the windows. The port side gallery is shorter, for here at one end are crew's cafeteria and main recreation room.

On deck there are six pairs of sampson posts, which are self-supporting and have no guys. Eighteen electric winches are provided for the working of the 14 five-ton derricks and the four heavier ones (of 10 tons capacity) which are fitted on the second pair of sampson posts. The contactor house roofs—on one of which is carried the dinghy—project fore and aft to provide shelter for the winchmen. Steel hatch covers are fitted and these, when opened, slide athwartships, their weight being taken at one end by supports running on railtracks. The short superstructure is rounded rather than streamlined. Two boats are carried here, a pulling boat to port and a motor driven boat to starboard.

Mooring facilities at St. John's are very tricky for there is a great rise and fall of tide, the wharves are very short and there is considerable current. To meet these difficulties a destroyer-type centre-line bull ring is fitted at stem and stern, and two more are placed each side amidships.

As can be seen from the illustrations the general exterior colour scheme is a smart one, the hull having grey and white topsides with red boot topping below, the superstructure is white, the sampson posts of the usual tan mast colour while the funnel is painted all black.

THE PAPER SHORTAGE

Our readers will be only too well aware of the shortage of newsprint, which is reflected in the small size of our newspapers. We would like to remind them that there is always the possibility that the shortage might at any time extend to paper for magazines and books. It is therefore advisable for those who obtain their copies of MODEL SHIPS & POWER BOATS by casual purchase to place a firm order with their newsagent or bookstall. It is usually the issue one has missed which contains the article one is requiring a few months later, and a regular order prevents this possibility.

Editor's Correspondence

SMOKE PRODUCTION

DEAR SIR :

Your correspondent, Mr. J. Sirett (October issue), has asked for methods of producing " smoke " for a model ship, and I would like to offer some suggestions. Although your method of dropping hydrochloric acid on cotton wool soaked in ammonia solution would work, I do not consider it necessary to provide a dropping apparatus. Two small dishes, containing cotton wool soaked in ammonia solution in one and hydrochloric acid in the other, is all that is required. If placed side by side at the base of the funnel, the vapours of each will react and produce the dense fumes or smoke to which you refer. It is recommended that if the funnel is of metal the inside be coated with a suitable paint to protect it from the action of hydrochloric acid fumes. It is always possible to have a small amount of unneutralised hydrochloric acid which would show its effects in the course of time. Acetic acid could also be tried.

If Mr. Sirett has any quantity of plastic wood which has hardened, he might try igniting this, and when it begins to blacken and portions of it start to glow like charcoal, the flame should be blown out. I have found that the remainder continues to smoulder for a considerable time, emitting quantities of smoke.

Unfortunately, these methods do not produce black smoke, which is usually associated with oil fuel, or even the brownish-grey smoke from coal. To obtain these, a material which would produce fine soot is required, and a carbonaceous substance is indicated.

Since the space is rather small it is considered that the presence of an oxidising agent, whatever the mixture being used, would keep the combustion regular, especially if the funnel is of metal, which would tend to conduct away the heat and so possibly extinguish the flame.

Coal is fairly rich in volatile carbon compounds, as can be seen when it is heated. If these are incompletely burned, common chimney smoke is the result.

I recollect, that some years ago, whilst experimenting, I mixed coal dust with potassium nitrate, which when ignited burned rather rapidly emitting volumes of smoke. If relatively small quantities of the nitrate are used, the combustion rate can be moderated. The addition of inert materials would also help in this matter. It may be found necessary to add other combustible materials such as charcoal, sawdust, etc., to make ignition easier. By adding water to make a stiff paste the final mixture can be made into blocks and allowed to dry.

It should be remembered that mixtures containing nitrates in quantity can be explosive, especially if confined. As little as possible should be used.

The ingredients should be ground before mixing, but it may be that if the coal be coarse, and the remainder fine, more smoke may result due to the interior of the particle volatilising after the nitrate has used all its oxygen.

I hope that these suggestions will be of help to your correspondent and other readers interested in smoke production.

Yours faithfully,

R.A.F., Calne, Wilts. B. A. WYNDHAM.

SAILING MODEL CLIPPERS

DEAR SIR :

Having seen the article on the building of the *Archibald Russell* in your March issue (upon which I congratulate you), I felt I must write and say that I disagree with the way it is being sailed. The model is an excellent one and I hope my new *Caliph* may be as well built and look as well.

BUT. It is being sailed in the wrong way. She has too much ballast. This is shown by her lowness in the water ; also, in a stiff breeze, corresponding in scale to a moderate gale, she can carry full sail ! This is wrong. In a stiff breeze she should be furled, down to topsails, or perhaps lower top gallants. Even so, she would be under a press of canvas, and, I should think, the real ship would be almost out of control. The ship should be *alive, not* having that liner-like steadiness which means too much ballast.

I entirely agree with Mr. Smith's adherence to scale. I also congratulate him on bending planks $\frac{1}{8}$ in. by 1 in. round the blunt bow and stern to such good effect. I had a little difficulty with obeche planks $\frac{1}{16}$ in. $\times$ $\frac{1}{4}$ in., on my *Caliph*. I shall, in rigging the new *Caliph*, depart from scale, in respect of the rudder, false keel, spanker (to work the rudder) and I shall lengthen the bowsprit and jibboom. This should improve, not detract from, her appearance.

I think that if any rigging is omitted it should be the lightest of running rigging, not backstays. These stays, backstays, shrouds, etc., do lend extreme realism to a ship.

By the way, if Mr. Smith wants to furl sails (and I am glad to see he is reducing the ballast) he can put sheets on the sails about $1\frac{1}{2}$ in. long. These are fastened with a clove-hitch to the yardarm below, and the sail can be rolled up and fastened to its own yard.

Yours faithfully,

Mexborough, Yorks. CLEMENT S. ROBINSON.

We have had this letter for some time but have now decided to publish it as many of our readers will have seen Mr. Robinson's sailing clipper " Caliph " at this year's " M.E." Exhibition. Mr. Robinson has gone very thoroughly into the question of sailing model clippers and his views are of interest.

NOTES FROM THE SHIP MODEL SOCIETIES.

By " Jason "

No. 3 of *Ahoy* ! the journal of the *Sheffield Ship Model Society* is out and I feel that some of the larger societies might well embark on a journal which is similar in scope and objective. This issue contains a lengthy description of the society's last annual exhibition and in addition there are articles on research, 19th century steam warships, whaling and the mysteries of navigation. In one of the articles a plea is made for the furtherance of joint effort in the local exhibitions. This has my warm support. In their last exhibition, Birmingham sent a representative group of ship models, and two of them won open awards in the Sheffield exhibition. Birmingham, which has now got the services of the former Bristol secretary, Arthur W. Kirton, may have some other calls upon its services.

1951 will bring the first exhibition of the *Cardiff Ship Model Society* and they are hoping to have the help of the Birmingham and Bristol societies in this effort. One of the leaders of the *Cardiff S.M.E.* is I. W. Marsh who won the Sailing Ship Championship Cup this year at the *Model Engineer Exhibition* with his magnificent model of the clipper *Thermopylae* and there are several other good modellers as well. Mr. Marsh's many friends will be pleased to know that his *Thermopylae* has been purchased by *The National Maritime Museum*. Frankly I doubt if there is a better model in the museum as far as craftsmanship is concerned. The date of the Cardiff exhibition has not yet been fixed, but it may be some time in the early summer, 1951. Cardiff have achieved a splendid result in their first year.

Bromley Ship Model Society has had a splendid first year, too, culminating in a fine exhibition of members' work. Here is an excellent team spirit. Every model was from the society with a good level of craftsmanship. A loan model was, to me, very interesting. It was a scale model of Lord Brassey's famous yacht *Sunbeam* which made the memorable voyage round the world. This particular model was made by a member of the crew and gained a silver medal in 1881. It is still an excellent model. The Bromley exhibition was staged at Church House, College Road and the Mayor with his party spent a very interesting hour. Mr. Ware, the secretary, has had much to do with the launching and successful first year's work in Bromley. The seal of success was set by Sir Frank Alexander a past Prime Warden of the Worshipful Company of Shipwrights who expressed his delight at such a fine array of work.

One of the finest models in wood which I have seen for some time was at the Luton exhibition of the *South Beds S.M.S* recently. Luton members threw open to all comers a chance to show their work, and, as is usual, the society found many new modellers living on their own doorstep. I commend Luton's method of recognising good work by the granting of diplomas. These were quite inexpensive and yet were much appreciated by the winners. Sheffield should contact Luton for some joint efforts in shows. Luton has some good modellers.

IMPORTANT

Readers are reminded that the " M.E." Special Boat Competition is open until December 31st. Silver and bronze medals and certificates are awarded. Entry forms can be obtained from this office.

THE WALLASEY MODEL POWER BOAT AND YACHT CLUB

During its first year of existence this club has increased its membership from six to twenty-one. Much progress has been made in the way of cleaning the lake of weeds, etc., and after much arguing with the local Parks Committee, a club house was procured, though in a very dilapidated condition. However, having re-roofed the place, replaced bad timbers and fitted new doors, lockers, etc., the club house is now in regular use. The accent in the club is on displacement prototypes more than hydroplanes, although many members are experimenting with " D " Class boats. The fleet, which is made up of various types of craft, includes steam tugs, steam yachts, fast cabin cruisers, a paddle steamer, one river steam launch, several diesel cruisers, a large model destroyer, and a number of smaller models of Mersey tugs, launches and a ferry boat. The club has competed against the Crosby model club but is very anxious to get in touch with other clubs so as to provide more inter-club events. If any neighbouring clubs care to arrange meetings with the Wallasey club, the hon. secretary, HOWARD A. JACKSON, of 21, Deveraux Drive, Wallasey, would be very pleased to hear from you.

SALISBURY & DISTRICT MODEL ENGINEERING SOCIETY

Welcome news to members interested in model boat building is that a sailing water has at last been obtained. It is hoped that this facility will encourage model boat-building and attract new members to the society so that a Marine Craft Section can be formed. Further details can be obtained from the hon. sec., R. A. READ 7, De Vaux Place, Salisbury.

DONCASTER & DISTRICT MODEL YACHT & POWER BOAT ASSOCIATION

The above association was formed at a meeting held recently at the Mansion House, Doncaster in the presence of the Mayor, Coun. H. Wilson and Coun. T. H. Wright, chairman of the Parks Committee. There is a definite prospect of a sailing water being made available in the not too distant future. From a copy of the Constitution which we have received it is evident that the association is being formed on sound lines, and should be a great boon to the model yacht and power boat enthusiasts in the vicinity. The Mayor has consented to be president. The hon. commodore is Lieut. J. Farrell of Thorne Sea Cadets, and the chairman is Mr. J. S. Reeves. The secretary, MISS M. J. TAVENDER of 17, Caxton Road, Woodlands, nr. Doncaster, will be pleased to supply any further information.

THAMES SHIPLOVERS & SHIP MODEL SOCIETY

On October 26th, Mr. G. Worcester, for 35 years with the Chinese Maritime Customs, gave a very enjoyable lecture on Chinese junks which was greatly appreciated by the large audience present. The December meeting will be held on Thursday the 14th, at 6.45 p.m., when Capt. Hendaye will give a lecture on " London's River and Docks " which will be illustrated by slides and films.

WEST LONDON M.P.B.C.

The West London Model Power Boat Club will hold its annual general meeting at the Leinster Hotel, Ossington Street, W.2, on Sunday, December 10th, at 11 a.m. All members are requested to attend.

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All correspondence relating to sales of the paper should be addressed to THE SALES MANAGER and correspondence relating to display advertisements to THE ADVERTISEMENT MANAGER.

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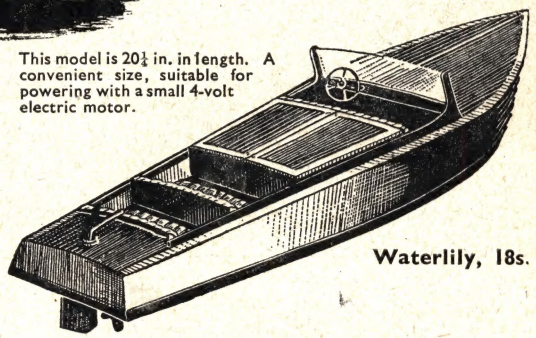

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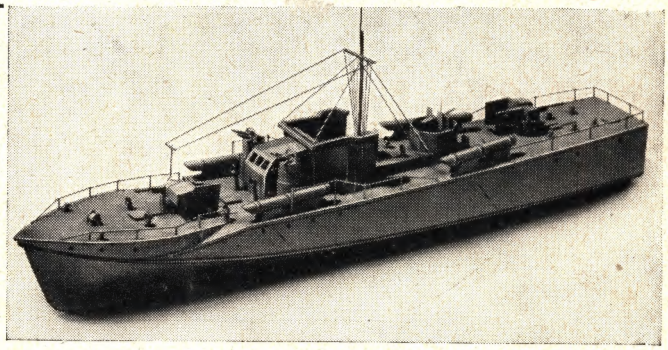

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